APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,128	06/22/2001	Morris E. Jones, JR.	CT-P9191-D	9026

7590 04/22/2004	EXAMINER

David B. Ritchie
THELEN REID & PRIEST LLP
P.O. BOX 640640
San Jose, CA 95164

EXAMINER
HARRISON, CHANTE E

ART UNIT	PAPER NUMBER
2672	9

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/888,128	JONES,, MORRIS E.
	Examiner	Art Unit	
	Chante Harrison	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 February 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>9-19 and 21-40</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>9-19,21-40</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)　　　　Office Action Summary　　　　Part of Paper No./Mail Date 9

DETAILED ACTION

1.   This action is responsive to communications: Amendment C, filed on 2/12/04.

This action is made Final.

2.   Claims 9-19, 21-40 are pending in the case. Claims 1, 14, 21, 26,30 and 35 are

independent claims. Claims 9-19 and 21-29 have been amended. Claims 30-40 have

been added.

Drawings

1.   The proposed drawing corrections and/or the proposed substitute sheets of

drawings, filed on 12/12/04 have been approved by Examiner. Thus, the objection to

the drawings for including and/or not including reference signs mentioned in the

description is withdrawn.

Specification

1.   The amendment filed 2/12/04 is objected to under 35 U.S.C. 132 because it

introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment

shall introduce new matter into the disclosure of the invention. The added material

which is not supported by the original disclosure is as follows: the use of memory layer

three for the lookup table will not conflict with other uses of the memory.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

2.   Claims 9, 10, 13-14, 21-22, 26, 30-31 and 34-35 are rejected under 35

U.S.C. 102(e) as being anticipated by Kotha et al., U.S. Patent 5,521,614, 5/1996.

As per independent claims 9, 21 and 30, Kotha discloses receiving a data element

representing a row of a text character cell (col. 5, ll. 5-10); forming a horizontal

expansion pattern corresponding to said text character, based on character code (i.e.

expanding the character horizontally based on the display mode defining the number of

dots for the character) (col. 5, ll. 38-65) and row number of the text character cell (i.e. a

shift register loaded with the binary data representative of the graphics data, where the

graphics data are defined by row and column numbers, is used to indicate the

position/row where replication will begin) (col. 5, ll. 1-15; col. 7, ll. 10-25, 45-65), the

row number being determined base on the horizontal frequency (col. 7, ll. 15-23) said

pattern set to a specified length (col. 5, ll. 50-55); appending said horizontal expansion

pattern to the second sequence of data elements (Fig. 2; col. 5, ll. 56-64); and

determining whether another data element should be read (col. 7, ll. 17-25). Kotha inherently suggests that the cell row number is used to form the horizontal expansion pattern in that he teaches a shift register loaded with the binary data representative of the graphics data, where the graphics data are defined by row and column number, is used to indicate the position/row where replication will begin.

As per dependent claims 10, 22 and 31, Kotha discloses the specified length is the same for all horizontal expansion patterns comprising said second sequence of data elements (col. 6, l. 40-46); and said second sequence of data elements fills a flat panel display (abstract; col. 4, ll. 49-51).

As per dependent claims 13 and 34, Kotha discloses the data element comprises eight bits (col. 5, ll. 42-45); and said horizontal expansion pattern comprises ten bits (col. 5, ll. 60-64).

As per independent claims 14, 26 and 35, Kotha discloses receiving a plurality of bits representing a plurality of text character cell lines (col. 5, ll. 5-10); determining the first and last bits for each data element within said first sequence (col. 5,ll. 56-59); forming a horizontal expansion pattern corresponding to said text character, said pattern set to a specified length (col. 5, ll. 50-55); appending said horizontal expansion pattern to the second sequence of data elements (Fig. 2; col. 5, ll. 56-64); and determining whether another data element should be read (col. 7, ll. 17-25).

Kotha discloses determining the cell row number based on the horizontal

frequency (i.e. a shift register loaded with the binary data representative of the graphics

data, where the graphics data are defined by row and column numbers, is used to

indicate the position/row where replication will begin) (col. 7,ll. 15-23, 45-65).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 15, 27 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kotha et al., U.S. Patent 5,521,614.

As per dependent claims 15, 27 and 36, Kotha discloses scanning said plurality of bits

for repeating bit values at whole number multiples of eight or nine (col. 7, ll. 25-39; col.

5, ll. 44-45), said bit values corresponding to the background color (abstract; col. 7, ll.

21-25); setting the cell line bit length to said whole number multiple (col. 7, ll. 40-43; col.

5, ll. 44-45). Kotha fails to specifically disclose setting the first bit of a data element to

the bit following said repeating bit value; and setting the last bit of a data element based

on said first bit and said cell line bit length. It would have been obvious to one of skill in the art at the time of invention to include setting the first bit of a data element to the bit following said repeating bit value; and setting the last bit of a data element based on said first bit and said cell line bit length in the disclosure of Kotha because Kotha teaches triggering a repeat signal using the far right bit of the character and maintaining the signal value for the horizontal length of the character which is determined as a result of the number of duplicated pixels (col. 7, ll. 20-45).

5.   Claims 11, 16, 23, 28, 32 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotha et al., U.S. Patent 5,521,614, and further in view of Bugg, U.S. Patent 5,016,000, 5/1991.

As per dependent claims 11, 16, 23, 28, 32 and 37, Kotha discloses a horizontal expansion pattern (col. 5, ll. 50-55) but fails to disclose the pattern contained in a lookup table indexed by character number and row number, which Bugg teaches (col. 3, ll. 10-26; col. 5,ll. 64-66). Bugg teaches a video display terminal having selective memory access o f a look-up table for providing character output data which includes the character shape pattern information in respective memory cell matrices accessed in accordance with digital codes to replicate a cell line (col. 3, ll. 10-26; col. 4,ll. 56-66). It would have been obvious to one of skill in the art to include Bugg's teaching of an expansion pattern contained in a lookup table indexed by character code corresponding to a character space pattern represented by bits and memory cell matrix containing rows with the disclosure of Kotha because Kotha teaches accessing character

expansion data via a VGA controller that accesses video memory storing addressable image data including character bit data (col. 5, ll. 1-15; col. 7, ll. 10-40), wherein a look-up table provides an efficient means of addressing data.

As per dependent claims 18 and 39, Kotha discloses determining whether a horizontal scan has completed (col. 7, ll. 15-25, 40-45); loading horizontal expansion information for the next row when a horizontal scan has completed (col. 7, ll. 15-22). Kotha fails to disclose loading into VGA RAM a lookup table containing the information, which Bugg discloses (col. 3, ll. 20-25; col. 4, ll. 27-31, 56-66). It would have been obvious to one of skill in the art at the time of invention to include Bugg's disclosure of loading into video memory the look-up table of digital codes addressing character space patterns and memory cell matrices data with the disclosure of Kotha because Kotha teaches accessing character expansion data via a VGA controller that accesses video memory storing addressable image data including character bit data (col. 5, ll. 1-15; col. 7, ll. 10-40), wherein a look-up table provides an efficient means of addressing data.

5.   Claims 12, 17, 19, 24-25, 29, 33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotha et al. in view of Bugg as applied to claims 11, 16, 18, 23, 28, 32 and 37 above and further in view of Bril et al., U.S. Patent 5,539,428, 7/1996.

As per dependent claims 12, 17, 19, 24, 29, 33 and 38 and 40, Kotha in view of Bugg fails to disclose the lookup table resides in layer 3 of VGA video RAM, which Bril

discloses (Fig. 2; col. 5, II. 15-25; col. 6,II. 60-65). Bril teaches a VGA controller having a video memory comprising multiple planes of which the third layer is used for storing font data. It would have been obvious to one of skill in the art at the time of invention to include Bril's disclosure of a lookup table resides in layer 3 of VGA video RAM in the disclosure of Kotha in view of Bugg because Kotha teaches a VGA controller accessing stored character data from video memory storing addressable image data including character bit data (col. 5, II. 1-15).

As per dependent claim 25, Kotha discloses the data element comprises eight bits (col. 5, II. 42-45); and said horizontal expansion pattern comprises ten bits (col. 5, II. 60-64), in view of Bugg and further in view of Bril.

Response to Arguments

6.   Applicant's arguments with respect to claims 1-19 and 21-29 have been

considered but are moot in view of the new ground(s) of rejection.

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 703-305-3937. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison
Examiner
Art Unit 2672

March 16, 2004

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600